

Date: Thu, 10 Feb 94 04:30:46 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #25
To: Ham-Homebrew

Ham-Homebrew Digest Thu, 10 Feb 94 Volume 94 : Issue 25

Today's Topics:

2m/70cm linear - circuit wanted
QRP shopping list

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 8 Feb 1994 15:25:16 GMT
From: ncar!csn!server!stortek.com!patrick_tatro@ames.arpa
Subject: 2m/70cm linear - circuit wanted
To: ham-homebrew@ucsd.edu

In article <1994Feb8.080757.1530@mnemosyne.cs.du.edu> dtock@nyx.cs.du.edu (David
Tock) writes:

>From: dtock@nyx.cs.du.edu (David Tock)
>Subject: 2m/70cm linear - circuit wanted
>Date: Tue, 8 Feb 94 08:07:57 GMT

>I use a dual band Icom HT in the car. Having bent longer aeralis, I now
>use a 1/4 wave. I could do with more 'oomph' but find commercial dual
>band linears excessively pricey - typically between 250 and 400 UK pounds.

>Can anyone give me pointers to published designs or suitable circuits to
>build one myself? Other comments or suggestions welcomed.

>Thanks

>David (GM0SYA)

David

Communication Concepts Inc. has a kit for 2 meters that sells for \$119 that can take 5 watts to 50 or 60 watts and they also sell 70cm linear kits for \$159. I don't know if this fits your needs, but I built the 2 meter amplifier and it works great. If you need their address, Email me.

73's

Patrick Tatro NOWCG

Date: 9 Feb 94 19:17:21 GMT

From: ogicse!news.tek.com!tekig7!tekig6!royle@network.ucsd.edu

Subject: QRP shopping list

To: ham-homebrew@ucsd.edu

myers@pongo.West.Sun.COM (Dana Myers):

>>

>>Transistors

>[...]

>>2N4416+

>[...]

>>MPF102+

>These are essenitally the same transistor, at least as far as QRP projects
>go. . .

Although usually true, there are a couple of common applications where substituting an MPF102 for a 2N4416 might cause a problem. These JFETs are commonly used as an oscillator, either Harley or Colpitts. In these simple oscillators, the oscillator output amplitude is directly related to the individual device's pinchoff voltage. The MPF102 has much looser specifications, so in some cases will deliver too small (or large) a signal when used in one of these oscillators in place of a 2N4416. Of course, you can make up the difference in a following stage if it's a one-off design or you're willing to put in an adjustment.

The other application where you might have a problem is using the MPF102 for a common-gate RF amplifier. A typical application runs the JFET at I_{dss} and couples the signal in through a 1:4 impedance ratio transformer. With the 2N4416, this will result in an input SWR of 1.5 or less; the MPF102 can present a mismatch as high as 2.5:1 because of its looser specs. This may not cause a problem, but it could reduce stage gain. Or if the common-base stage follows a filter, it could result in degraded filter performance.

You can always substitute a 2N4416 for an MPF102 (unless the metal case on

the former causes a problem), and except for the two applications above, the reverse substitution is usually ok too.

73,

Roy Lewallen, W7EL

roy.w.lewallen@tek.com (new address - the old one still works, too)

Date: Mon, 7 Feb 94 09:33:55 GMT

From: mnemosyne.cs.du.edu!nyx!dtock@uunet.uu.net

To: ham-homebrew@ucsd.edu

References <654f021a5b3Z01@JUTS.ccc.amdahl.com>,

<759831571snx@djwhome.demon.co.uk>, <CKHACp.LJM@hawnews.watson.ibm.com>

Subject : Re: Schematics CAD, anyone?

In article <CKHACp.LJM@hawnews.watson.ibm.com>,

Uri Blumenthal <uri@watson.ibm.com> wrote:

>Hi,

> Is there a decent CAD program, that does schematics?

I use the evaluation version of PADS-LOGIC and PADS-PCB. This is a limited version of a commercial system, but the limits have not bothered me so far.

It comes with a big library of components, including lots of ICs, and when making the PCB layout, it can do clever things (well I think they are clever) like switching pins and gates on logic ICs automatically if it helps shorten tracks. Worth a look, I would say...

David (GM0SYA)

Date: Tue, 8 Feb 1994 17:21:47 GMT

From: ihnp4.ucsd.edu!sdd.hp.com!hpscit.sc.hp.com!news.dtc.hp.com!col.hp.com!csn!server!stortek.com!patrick_tatro@network.ucsd.edu

To: ham-homebrew@ucsd.edu

References <1994Feb8.080757.1530@mnemosyne.cs.du.edu>,

<patrick_tatro.16.7C558180@stortek.com>, <CKwzMz.9Ks@ncifcrf.gov>

Subject : Re: 2m/70cm linear - circuit wanted

In article <CKwzMz.9Ks@ncifcrf.gov> mack@ncifcrf.gov (Joe Mack) writes:

>From: mack@ncifcrf.gov (Joe Mack)

>Subject: Re: 2m/70cm linear - circuit wanted

>Keywords: Kits

>Date: Tue, 8 Feb 1994 16:40:11 GMT

>In article <patrick_tatro.16.7C558180@stortek.com> patrick_tatro@stortek.com
>(Patrick Tatro) writes:

>>In article <1994Feb8.080757.1530@mnemosyne.cs.du.edu> dtock@nyx.cs.du.edu
>(David Tock) writes:

>>>From: dtock@nyx.cs.du.edu (David Tock)

>>>Subject: 2m/70cm linear - circuit wanted

>>>Date: Tue, 8 Feb 94 08:07:57 GMT

>>

>>David

>> Communication Concepts Inc. has a kit for 2 meters that sells for \$119
>>that can take 5 watts to 50 or 60 watts and they also sell 70cm linear kits
>>for \$159. I don't know if this fits your needs, but I built the 2 meter
>>amplifier and it works great. If you need their address, Email me.

>>

>>73's

>>Patrick Tatro NOWCG

>>

>Really?

> I know someone has a kit, but it was 28V (my car is 12V). Are these
>12V and do they have the R/R relays for this price.?

> Joe Mack NA3T

> mack@ncifcrf.gov

Joe

The kit I built was 12V - I don't know what you mean by R/R relays - The
amp was a mono bander - It was real easy to assemble - It took abt 5 hours to
assemble and 1 hour to tune the SWR's . If you need more info contact
Communication Concepts Inc.

508 Millstone Drive

Beavercreek, Ohio

45434-5840

ph 513-426-8600

73's

Patrick Tatro NOWCG

End of Ham-Homebrew Digest V94 #25
